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## **2** The future of multiprocessor systems-on-chips

 Wayne Wolf

June DAC '04: Proceedings of the 41st annual conference on Design automation  
2004

**Publisher:** ACM

Full text available:  [Pdf](#) (58.72 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 31, Downloads (12 Months): 208, Citation Count: 22

This paper surveys the state-of-the-art and pending challenges in MPSoC design. Standards in communications, multimedia, networking, and other areas encourage the development of high-performance platforms that can support a range of implementations of ...

**Keywords:** MPSoC, embedded software, low power, real-time, system-on-chip

## **3** Realistic materials in computer graphics

 Hendrik P. A. Lensch, Michael Goesele, Yung-Yu Chuang, Tim Hawkins, Steve Marschner, Wojciech Matusik, Gero Mueller

July SIGGRAPH '05: ACM SIGGRAPH 2005 Courses  
2005

**Publisher:** ACM

Full text available:  [Pdf](#) (18.24 MB) Additional Information: [full citation](#), [references](#)

**Bibliometrics:** Downloads (6 Weeks): 82, Downloads (12 Months): 751, Citation Count: 0

## **4** Distributed musical performances: Architecture and stream management

 Roger Zimmermann, Elaine Chew, Sakire Arslan Ay, Moses Pawar

May ACM Transactions on Multimedia Computing, Communications, and  
2008 Applications (TOMCCAP), Volume 4 Issue 2

**Publisher:** ACM

Full text available:  [Pdf](#) (1.27 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 30, Downloads (12 Months): 97, Citation Count: 0

An increasing number of novel applications produce a rich set of different data types that need to be managed efficiently and coherently. In this article we present our experience with designing and implementing a data management infrastructure for a ...

**Keywords:** Distributed immersive performance, multimedia storage, multimodal data recorder, networked musical performance

## **5 Supporting service discovery, querying and interaction in ubiquitous computing environments**

Adrian Friday, Nigel Davies, Nat Wallbank, Elaine Catterall, Stephen Pink  
November Wireless Networks, Volume 10 Issue 6  
2004

**Publisher:** Kluwer Academic Publishers

Full text available:  Pdf (209.21 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 9, Downloads (12 Months): 124, Citation Count: 5

In this paper, we contend that ubiquitous computing environments will be highly heterogeneous, service rich domains. Moreover, future applications will consequently be required to interact with multiple, specialised service location and interaction protocols ...

**Keywords:** distributed systems, middleware, mobile and ubiquitous computing, service discovery, service interaction

## **6 SECA: security-enhanced communication architecture**

 Joel Coburn, Srivaths Ravi, Anand Raghunathan, Srimat Chakradhar  
September CASES '05: Proceedings of the 2005 international conference on  
2005 Compilers, architectures and synthesis for embedded systems

**Publisher:** ACM

Full text available:  Pdf (396.53 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 9, Downloads (12 Months): 84, Citation Count: 1

In this work, we propose and investigate the idea of enhancing a System-on-Chip (SoC) communication architecture (the fabric that integrates system components and carries the communication traffic between them) to facilitate higher security. We observe ...

**Keywords:** AMBA Bus, access control, architecture, attacks, bus, communication, digital rights management (DRM), intrusion detection, security, security-aware design, small embedded systems, system-on-chip (SoC)

## 7 Hiperlan/2 public access interworking with 3G cellular systems

Stephen McCann, Helena Flygare

January 2004 Wireless Networks, Volume 10 Issue 1

**Publisher:** Kluwer Academic Publishers

Full text available:  [PDF](#) (196.64 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#),  
[index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 4, Downloads (12 Months): 81, Citation Count: 1

This paper discusses some of the recent work within the Broadband Radio Access Network (BRAN) project of ETSI (European Telecommunications Standards Institute), regarding the issue of establishing an interworking solution between Hiperlan/2 and 3G cellular ...

**Keywords:** 3G, BRAN, ETSI, Hiperlan/2, WIG, interworking, public access

## 8 Raging incrementalism: harnessing change with open-source software

 John C. Georgas, Michael M. Gorlick, Richard N. Taylor

May 2005 [5-WOSSE: Proceedings of the fifth workshop on Open source software engineering](#)

**Publisher:** ACM

Full text available:  [PDF](#) (153.70 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 5, Downloads (12 Months): 39, Citation Count: 0

Change is a bitter fact of life for system developers and, to a large extent, conventional practices are aimed at arresting change and minimizing its effects. We take the opposite view and are exploring system engineering practices that harness the forces ...

**Keywords:** open source, raging incrementalism, representational state transfer

## 9 Raging incrementalism: harnessing change with open-source software

 John C. Georgas, Michael M. Gorlick, Richard N. Taylor

July 2005 [ACM SIGSOFT Software Engineering Notes, Volume 30 Issue 4](#)

**Publisher:** ACM

Full text available:  [PDF](#) (153.70 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 5, Downloads (12 Months): 39, Citation Count: 0

Change is a bitter fact of life for system developers and, to a large extent, conventional practices are aimed at arresting change and minimizing its effects. We take the opposite view and are exploring system engineering practices that harness the forces ...

**Keywords:** open source, raging incrementalism, representational state transfer

## **10 Real-world relativity: image-based special relativistic visualization**

Daniel Weiskopf, Daniel Kobras, Hanns Ruder

October 2000 VIS '00: Proceedings of the conference on Visualization '00

**Publisher:** IEEE Computer Society Press

Full text available:  [PDF](#) (682.20 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 0, Downloads (12 Months): 47, Citation Count: 0

**Keywords:** image-based rendering, plenoptic function, scientific visualization, special relativity

## **11 Analysis of the zeroconf protocol using UPPAAL**

 Biniam Gebremichael, Frits Vaandrager, Miaomiao Zhang

October 2006 EMSOFT '06: Proceedings of the 6th ACM & IEEE International conference on Embedded software

**Publisher:** ACM

Full text available:  [PDF](#) (229.26 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 8, Downloads (12 Months): 78, Citation Count: 1

We report on a case study in which the model checker Uppaal is used to formally model parts of Zeroconf, a protocol for dynamic configuration of IPv4 link-local addresses that has been defined in RFC 3927 of the IETF. Our goal has been to construct ...

**Keywords:** formal methods, model checking, modelling, timed automata, validation, verification, zeroconf protocol

## **12 Multimedia room bridge adapter for seamless interoperability between**

 heterogeneous home network devices

Sung Ho Park, Myung Jin Lee, Soon Ju Kang

January 2008 MG '08: Proceedings of the 15th ACM Mardi Gras conference: From lightweight mash-ups to lambda grids: Understanding the spectrum of distributed computing requirements, applications, tools, infrastructures, interoperability, and the incremental adoption of key capabilities

**Publisher:** ACM

Full text available:  [PDF](#) (349.62 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

**Bibliometrics:** Downloads (6 Weeks): 11, Downloads (12 Months): 135, Citation Count: 0

A home network is a typical ubiquitous computing network that consists of various consumer devices and service environments. Home networks are requiring increasingly more complicated services, such as multimedia home theater and the monitoring and controlling ...

**Keywords:** distributed network, home network, multimedia room bridge adapter, seamless interoperability

### **13 Stenning's protocol implemented in UDP and verified in Isabelle**

Michael Compton

January 2005 CATS '05: Proceedings of the 2005 Australasian symposium on Theory of computing - Volume 41, Volume 41

**Publisher:** Australian Computer Society, Inc.

Full text available:  [pdf](#) (248.21 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 2, Downloads (12 Months): 22, Citation Count: 2

This paper is about the mechanical verification of UDP based network programs. It uses the UDP portion of a formal model of the Internet protocols TCP (Transmission Control Protocol) and UDP (User Datagram Protocol). The model includes asynchronous message ...

**Keywords:** distributed systems, formal verification, theorem proving

### **14 FPGA-based networking systems for high data-rate and reliable in-vehicle communications**

Sergio Saponara, Esa Petri, Marco Tonarelli, Iacopo Del Corona, Luca Fanucci  
April 2007 DATE '07: Proceedings of the conference on Design, automation and test in Europe

**Publisher:** EDA Consortium

Full text available:  [pdf](#) (448.24 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

**Bibliometrics:** Downloads (6 Weeks): 7, Downloads (12 Months): 140, Citation Count: 1

The amount of electronic systems introduced in vehicles is continuously increasing: X-by-wire, complex electronic control systems and above all future applications such as automotive vision and safety warnings require in-car reliable communication backbones ...

## **15 Channel trees: reducing latency by sharing time slots in time-multiplexed networks on chip**

 Andreas Hansson, Martijn Coenen, Kees Goossens  
September 2007 CODES+ISSS '07: Proceedings of the 5th IEEE/ACM international conference on Hardware/software codesign and system synthesis

**Publisher:** ACM

Full text available:  [Pdf](#) (188.51 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 6, Downloads (12 Months): 97, Citation Count: 0

Networks on Chip (NoC) have emerged as the design paradigm for scalable System on Chip communication infrastructure. A growing number of applications, often with firm (FRT) or soft real-time (SRT) requirements, are integrated on the same chip. To provide ...

**Keywords:** network-on-chip, quality-of-service, system-on-chip, time-division-multiplexing

## **16 System-level design of IEEE1394 bus segment bridge**

 Hirofumi Yamamoto, Keishi Chikamura, Atsuhiro Shigiyama, Kosuke Tsujino, Tomonori Izumi, Takao Onoye, Yukihiko Nakamura  
October 2002 ISSS '02: Proceedings of the 15th international symposium on System Synthesis

**Publisher:** ACM

Full text available:  [Pdf](#) (768.50 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 5, Downloads (12 Months): 21, Citation Count: 0

A system simulation environment is constructed dedicatedly for IEEE1394 high-speed digital communication. In this environment, various network transactions inherent in communication systems are taken into account for system simulation, which is indispensable ...

**Keywords:** C/C++, HW/SW co-simulation, IEEE1394, PLI, bus bridge, verilog-HDL

**17** On demand label switching for spontaneous edge networks



Vincent Untz, Martin Heusse, Franck Rousseau, Andrzej Duda

August 2004 FDNA '04: Proceedings of the ACM SIGCOMM workshop on Future directions in network architecture

**Publisher:** ACM

Full text available: [PDF](#) (267.58 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 2, Downloads (12 Months): 39, Citation Count: 1

We consider the problem of interconnecting hosts in spontaneous edge networks composed of various types of wired or wireless physical and link layer technologies. All or some hosts in a spontaneous network can be organized as a multi-hop ad hoc network, ...

**Keywords:** MPLS, ad-hoc networks, autoconfiguration, spontaneous networks

**18** Tracking points using projective reconstruction for augmented reality



S. K. Ong, M. L. Yuan, A. Y. C. Nee

November 2005 GRAPHITE '05: Proceedings of the 3rd international conference on Computer graphics and interactive techniques in Australasia and South East Asia

**Publisher:** ACM

Full text available: [PDF](#) (553.95 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 6, Downloads (12 Months): 81, Citation Count: 0

Natural feature tracking is a popular research topic in computer vision and has been used in Augmented Reality (AR) applications. Current natural feature trackers have two major limitations in AR applications. Firstly, the natural features may be lost ...

**Keywords:** augmented reality, natural features, projective reconstruction, registration, tracking

**19** Position paper: the role of platforms and operating systems in supporting home networks



Nigel Davies, Pierre-Guillaume Raverdy

September 2000 EW 9: Proceedings of the 9th workshop on ACM SIGOPS European workshop: beyond the PC: new challenges for the operating system

**Publisher:** ACM

Full text available: [PDF](#) (37.75 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

**Bibliometrics:** Downloads (6 Weeks): 3, Downloads (12 Months): 25, Citation Count: 0

As researchers look beyond the PC there is increasing interest in developing and deploying sophisticated home networks. Such networks might allow the seamless integration of information and services produced both within the home and externally, enabling ...

**20** A generic architecture for on-chip packet-switched interconnections



Pierre Guerrier, Alain Greiner

January 2000 DATE '00: Proceedings of the conference on Design, automation and test in Europe

**Publisher:** ACM

Full text available:  [Publisher Site](#),  [Pdf \(100.74 KB\)](#) Additional Information: [full citation, references, cited by, index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 14, Downloads (12 Months): 127, Citation Count: 100

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